Contracting Challenges of DOD's Unique Identification Policy

The release of an interim DFARS rule in October 2003 set the stage for launching an ambitious program of unique identification (UID) by the Department of Defense (DOD). Beginning in January 2004, DOD will take the initial steps to improve both fiscal and logistics management. The UID policy encompasses partmarking, configuration control, systems engineering, asset management, and accounting. As contracts professionals, whether in the DOD or in the defense industry, you will need to know how to deal with these new solicitation requirements. For the latest information, see http://www.acq.osd.mil/uid/.

The Origin of UID

The General Accounting Office (GAO) documented concerns with DOD management of its inventory of equipment. It found that DOD's

About the Authors

LEANTHA SUMPTER is the special assistant to the director, defense procurement and acquisition policy, Department of Defense, located in Washington, D.C. She is a member of the NOVA Chapter.

EDWARD WILL is director for acquisition policy and e-business for Boeing's Integrated Defense Systems, located in St. Louis, Missouri. He is an NCMA Fellow and a member of the Gateway Chapter. Send comments on this article to cm@ncmahq.org.

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BY LEANTHA SUMPTER AND EDWARD WILL



inventory exceeded its war reserve or current operating requirements, but lacked key spare parts (particularly aviation spares) due to a lack of adequate accountability over material shipments or effective monitoring of defective spare parts. DOD's logistics community had actively advocated for use of various bar-coding schemes for several years to improve visibility and configuration tracking of parts. Under the auspices of the Future Logistics Enterprise initiative, giants in commercial retailing, wholesaling, and transport were benchmarked to determine the methods they have used to effectively manage their supply chain and inventories. Use of barcodes and other automatic identification technology (AIT) was identified as one element. DOD, together with industry, evaluated various barcode standards and their underlying technology. Over time, consensus was reached on some key fundamentals:

- Use of off-the-shelf technology and commercial standards, particularly those standards recognized by the International Standards Organization (ISO) enables an interoperable data environment;
- Adoption of certain accommodations for standards that were already in use by key industry groups that supply the DOD, such as commercial aviation; and
- Development of a scheme to uniquely identify parts, using marking language and codes representing the enterprise (e.g., manufacturer), part number and/or serial number. Essentially, the enterprise that puts the mark on an item is responsible for guaranteeing that the serial number assigned to the item is unique to that item. To accomplish this, the enterprise can either serialize within a part number (UID Construct #2) or just use serialization, which must be globally unique throughout life of the enterprise (UID Construct #1). This is the unique identification (UID).

These studies were well advanced when, in October 2002, DOD identified the need for improved tracking and valuation of plant, property, and equipment (PP&E) to comply with recent Federal Accounting Standards Advisory Board (FASAB) standards. The UID could serve two purposes:

- (1) Provide valuable business intelligence for logistics and
- (2) Act as the accurate source for valuation of property and equipment to help DOD achieve its goal of having a "clean" audit opinion by FY 2007.

Requirements for UID

Contracting officers have access to extensive guidance and documentation on this new requirement, beginning with the July 29, 2003, UID policy issued by the Honorable Michael Wynne, acting under secretary of defense for acquisition, logistics, and technology (USD-AT&L). In addition to this policy, DOD has also published a guide to uniquely identify tangible items, assuring valuation, accountability, and control of government property together with frequently asked questions (FAQs) and a set of business rules developed by a joint

government and industry team. The most current guidance is available at www.uniqueid.org. A DFARS interim rule regarding UID, titled Unique Item Identification and Valuation, was released in October 2003 as was the latest version of MIL-STD-130L, which specifies identification marking of U.S. military property. The DOD comptroller is developing new financial management regulations and guidance dealing with weapons systems asset accounting. Business rules covering valuation, property management, and other related subjects are being developed. Lastly, a joint government and industry team is developing a new or revised data item description (DID) to be included in the contract data requirements list (CDRL) for reporting the UIDs of parts and components in delivered end-items.

The Concept of UID and Valuation

As contracting professionals, in DOD or in industry, you will be faced with a variety of procurement situations where you may need to consider this new UID policy. As it has just been launched, there are no "cookbook" answers yet to many questions that may arise, although DOD does intend to build on the list of FAQs and other material available on the Web. The



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Defense Acquisition University (DAU) is also developing UID training material for rapid deployment training. To help you assess the right approach on solicitations and contracts with which you are involved, keep these few principles in mind:

- Items valued over \$5,000 and critical parts and components valued under \$5,000 will need to be marked in accordance with the requirements of MIL-STD-130L, and meet certain data standards that can be read by AIT devices. These same items, parts, and components will be uniquely identified by a UID, in accordance with the business rules. These UIDs will be stored in a central DOD database. Some existing form of barcode and unique identification may already be available for some commercial items, and the DOD will try to make use of these when present.
- All end-items in contracts require a unit value to be assigned, normally based on the negotiated price, adjusted for any contract changes through the time of delivery. The primary purpose of this value is to be able to account for the inventory of government assets. These values will be reported in the shipping notice/receiving report at the time of delivery. DOD intends to modify wide area workflow (WAWF) in 2004 to collect this information during the normal acceptance process. An initial operational capability (IOC) is planned for firm-fixed-price contracts by May 2004. The target for cost-type data capture is July 2004.
- Subassemblies, components, and parts embedded within an end-item may be marked with barcodes and assigned UIDs, but will not have assigned values. For example, the line replacement units making up the radar installed in a fighter aircraft will all have barcode part-markings and UIDs composed from a combination of the radar manufacturer's enterprise identifier code together with part and/or serial number; but

- only the aircraft will be delivered with a value (acquisition cost) assigned to the aircraft's UID.
- A new or revised DID will be added to the contract through the CDRL to obtain a report listing the UIDs for subassemblies, components, and parts embedded within an end-item at the time of delivery. This information will be useful for configuration management and logistics support over the course of the product's life cycle.
- Once delivered, it is intended that both the UID and valuation remain the same for the life of the end-item. UIDs cannot be reused even if the item is destroyed.
- While it is normally best to have the vendor determine the UID data (i.e., enterprise identifier, serial number, and part number, if required by the vendor for uniqueness) at the time the item is produced, there are other opportunities where equipment can be marked. For example, when it is received by another contractor or at a DOD facility, when it is shipped to another location, or when handled in any fashion, such as inventory or repair. The latter is called "opportunity-based marking." DOD facilities will soon be equipped with barcode readers and printers, and may be marking shipments and items on hand.

Determining the UID Requirement

Figure 1 on page 38 contains a decision tree for deciding what delivered items should be uniquely identified for DOD purposes. Commercial item identifications may be used, if normally available. The program manager is responsible for determining items to be uniquely identified. Program managers should determine UID requirements for items within CLIN delivered items consistent with the maintenance requirements for that item (e.g., government consumable and repairable items). There is no specific dollar threshold for such items

to be identified by a UID. Additionally, all items delivered on a CLIN must be valued—i.e., there is no dollar threshold on valuation.

Preparing Solicitations and Awarding Contracts

Our contracting life cycle usually begins with solicitations. This is a critical point for decisions that will affect how the UID policy is implemented. If the solicitation is for a service contract, then UID requirements do not apply, unless the service requirement involves item modification or repair. However, equipment involved in performance of the service may have a UID assigned. For example, beginning in 2005, government furnished equipment, property, or material (GFE/GFP/GFM) provided to contractors will need to be appropriately marked and have a UID assigned.

Early research and development (R&D) programs may not result in the delivery of tangible items that will require barcodes or a UID. Many of these result in research papers or documentation of test results. R&D hardware that never sees operational service nor requires logistical support might be treated as an expense for accounting purposes and would, therefore, not require a value to be assigned to its UID. However, the DOD program manager is responsible for making that determination. Some special test equipment or models that may be retained for use in future programs might need to be marked and valued. Operating lease items should not normally require unique DOD barcodes, a UID, or associated valuation, unless there is a likelihood they may subsequently be purchased or will be supported by organic DOD logistics. Software cost will generally be associated with the hardware on which it operates and become part of the capitalized value of that asset.

As referenced in the July 29 policy memorandum, the program manager has the responsibility to determine the need for and application of UID on contracts, working with his or her procuring contracting officer (PCO)

and others in the program office in logistics, systems engineering, and financial management disciplines. How UID is to be implemented will vary with the product life cycle, ranging from out-of-production systems to in production, or in advance of production, and whether the items are uniquely military or commercial offthe-shelf (COTS). The UID requirement for part marking does flow-down to suppliers as well, although assigning final valuation usually occurs at the level of the prime contract.

If UID is required on a new contract, major modification, or reprocurement of equipment (such as spare parts), then the RFP must include the DFARS clause 252.211-7003, Item Identification and Valuation, and reference to MIL-STD-130L. The new/revised DID may need to be included and called out on the CDRL list, due at the time of delivery for UIDs required within enditems. It would not be required if the delivered end-item is a single spare component or part. Most importantly, the CLIN structure must be organized

to identify all end-items, either at the CLIN level, or with SLINs for more complex situations where different end-items are to be delivered within a lot. On larger contracts, some CLINs may not result in the delivery of tangible items. For example, a contract may include delivery of hardware and services—where only the hardware will have UID requirements.

In requesting proposal responses, whether competitive or sole-source, it is recommended that no identifying UID or values be solicited from bidders, except where the normal CLIN pricing would be required. This avoids the cost and complexity of asking bidders, some of whom will be unsuccessful in competitions, from supplying the UID and value information at lower levels of detail. Even in sole-source scenarios, SLIN information about UIDs and associated values would need to be adjusted to the final negotiated price if solicited too early in the proposal process. It is not intended that UID and valuation information become certified cost and pricing data, unless

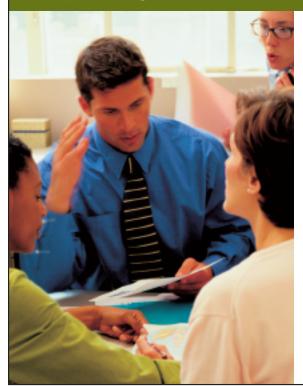
it would normally be used by the contractor to estimate the contract or required payment.

When the contract is finally negotiated and awarded, the PCO should work with the contractor to extend the CLIN structure as necessary, using informational SLINs if needed, and enter known UID and valuation references. These may need to be updated through subsequent contract modifications to incorporate other UID and valuation information as it becomes known during the contract performance.

Fixed-Price vs. Cost-Type

The effects of UID vary by contract type. On fixed-price contracts, the application of the UID policy is fairly simple: the final negotiated price, with any subsequent modifications through the time of delivery, is the value to be associated with the end-item. In the case of a lot buy, SLINs may be needed to segregate dissimilar items with their UIDs and associated values, although these will not affect payment. It is recommended that target fees be

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used for values on fixed-price incentive contracts unless the contract has been fully completed at the time of delivery and the final fee has been determined.

Cost-type contracts pose challenges for both the PCO and the contractor, since the final price is not known at the time of contract award. Fortunately, the bulk of DOD's purchase of tangible items is done under fixed-price contracts. If the cost-type contract is not for R&D or services, and it requires the delivery of tangible end-item(s), the UID valuation policy will apply. Key considerations for the program manager are whether the resulting delivered end-items will actually become government PP&E, be capitalized/depreciated, and/or if there are organic logistical requirements—if so, then UID valuation applies.

Cost will need to be collected for CLINs that result in delivered tangible end-items. The valuation will be the contractor's estimate of the fully burdened cost (all associated overhead and general and administrative (G&A) costs) of the item to the government at the time of delivery to the government.

DOD has decided not to wait for a final determination of costs before assigning values to delivered enditems—the contractors' estimate of cost at the time of delivery is sufficient—since the financial regulations permit use of estimates in assigning the acquisition value of items. There may need to be adjustments made later to the government's records to reconcile delivered items to final contract cost, including the appropriate fee—but this will be done within the DOD.

Contract Administration

As with most DOD contracts, the Defense Contract Management Agency (DCMA) and their administrative contracting officers (ACOs) can be a valuable aid to the program office and PCOs. For example, PCOs could delegate responsibility for ensuring the capture of UIDs and associated valuations with administrative modifications during contract performance. DCMA quality personnel can ensure compliance with MIL-STD-130L barcode markings. Modifications to wide area workflow (WAWF) are underway to

collect UID and valuation digitally in the future, supplying that information to the appropriate DOD database(s).

In order to give time for the UID policy to be implemented, DOD has decided to postpone the requirement to provide GFE, GFP, or GFM to contractors properly marked with barcodes and associated UID information. This delay will allow time for joint planning by program managers, procuring contracting officers, DCMA and their ACOs, and the contractor(s). However, beginning January 1, 2005, such GFE, GFP, or GFM will need to be appropriately tracked and potentially marked and managed consistent with the UID data construct before it is provided to contractors in accordance with the terms of the contract. If this GFE, GFP, or GFM is currently in possession of the DOD, action will need to be taken to mark and record it, whereas if it is to be ordered, the UID requirement will need to be in the contract to be issued during 2004.

The PCO will need to work closely with the contractor on contract changes, including identifying changes

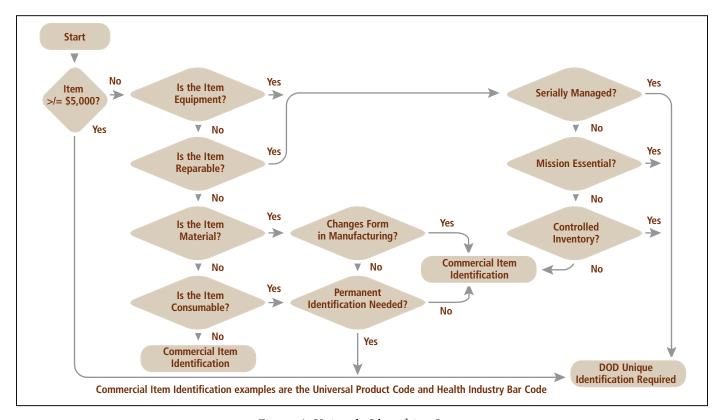


Figure 1. Uniquely Identifying Items

to end-items, UIDs, and associated valuations. This is an excellent opportunity for a government/industry integrated team, particularly on large sole-source programs, to plan for resulting contract modification that can contain all adjustments to CLINs, SLINs, and to tangible end-items and their prices, as well as the UIDs with their associated values.

Tooling and Test Equipment

One of the most complex aspects of the UID policy is how it will be applied to special tooling and special test equipment (ST/STE). Contractors will likely seek to revise their government property plans for this new UID policy. The PCO should rely on DCMA for insight as this process transitions.

It may be impractical for the contractor to identify all ST/STE in advance, at the time of contract award, or to place values on such items. Instead, the contractor may have to identify ST/STE as it is created during contract performance. The PCO, or the ACO acting on the PCO's behalf, may modify the contract to list ST/STE as SLIN items if they are to be delivered, with their UIDs. It may be best to assign values at the actual time of delivery, if the ST/STE is to be delivered elsewhere. The program manager and PCO, DCMA and ACO, and the contractor(s) should make this decision jointly. By the UID business rules, ST/STE need only be marked by contractors when it is to be physically shipped to another location-to another contractor or to a government facility. Until that time, marking of ST/STE is at the election of the contractor. Where the government elects to take title to, and physical possession of, ST/STE, marking and valuation will be required, as least for high-value property (over \$5,000). Some special allocations may be required to determine a value to be used for depreciation purposes for higher-value items. However, certain property will likely remain in the hands of the contractor for follow-on contracts and spares orders, and then ultimately disposed of.

While not vet determined, the DOD comptroller could decide to permit amortization of ST/STE costs over the production of units. This would increase the valuations of delivered end-items, but eliminate the need to value ST/STE held by the contractor until production has been completed. A complete set of business rules still needs to be developed for ST/STE in the UID environment based on new financial management regulations.

Ordering Spares

As noted in the July 29 policy, UID applies to reprocurement, including spares. This presents some transition challenges, particularly during the first year or two of implementation. There will be non-recurring costs to make the appropriate changes to drawings and marking instructions for legacy spare parts, in accordance with MIL-STD-130L requirements. The UID requirement will need to be determined and may be associated with the price of the spare part.

It would be desirable for DOD program offices to explore the best way to implement the UID requirement to minimize disruption of supplies by initiating discussions with the spares providers. If the spare part is being ordered under a previously priced, long-term ordering agreement or catalog pricing, the CO may need to recognize this added cost requirement. In some cases, particularly in consideration of small businesses, it may be desirable for the DOD-requiring activity to mark items when received rather than require the vendor to mark until the vendor's internal capabilities are established. However, the requiring activity must carefully plan to ensure that DOD activities can guarantee that the UID information they use is unambiguous and globally unique through life.

Summary

This is an important new DOD initiative that requires the careful attention of all those involved in DOD contracts. As contracts professionals, you will need to work closely with all disciplines affected—in government and industry—and with the entire supply chain to implement UID efficiently and effectively. Be prepared to be flexible, adapting the policy to the circumstances of your program. And, strive to keep current as the policy evolves over the next few years. There are other changes planned for 2004 and 2005, such as using another AIT technology, called radio frequency identification (RFID), as a further aid to logistics. Additionally, there is an initiative to apply this policy to internal DOD acquisitions. DOD must embrace best business practices to provide timely and affordable capabilities for our warfighters, as well as transparency in acquisition for the taxpayers. This policy offers long-term benefits in meeting these demands. cm

Endnotes

- 1. GAO-03-98.
- OUSD-AT&L Memorandum, July 29, 2003, Policy for Unique Identification (UID) of Tangible Items—New Equipment, Major Modifications, and Reprocurements of Equipment and Spares.
- Version 1.2, August 26,2003, Note: a more recent version may be displayed on the DOD UID Web page.
- Global Individual Asset Identifier, the Global Returnable Asset Identifier and the Vehicle Identification Number.
- One provision of the DFARS Interim Rule is for contracts to include a requirement for commonly accepted commercial marks if it is determined that unique item identification or a DOD-recognized unique identification equivalent is not required, and unique item identification is not already marked. In these cases where it is not necessary to distinguish among individual items of a product, commercial marks, such as the Global Trade Identification Number (GTIN), COMMON LANGUAGE® Equipment Identification (CLEI) for telecommunications equipment, and the Health Industry **Business Communications Council (HIBCC)** code for non-pharmaceutical healthcare products could be used.
- 6. Memorandum from under secretary of defense for acquisition, technology, and logistics, October 3, 2003.